Work Order I February-12-14 8:2	ID 113101 <b>P</b> 3:06 AM	3535-41 113101	*119	R101*			-				Page 1
Revision ID:	535-41 nless Steel Wearplate Center A		Accept	*N900	040	100	)*	Setup	Start Stop	IV	S1* S2*
Start Date: 2/10 Required Date: 2/10 Reference:	- •	— <b></b>		Cust Item :	ID:						. 17
	ocess Plan: MLJ				ate:			Run	Start Stop	*N	R1* R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr										
D3535	Rev B										
*1 \\ \*\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		per Dwg D3535 Dwg Rev: necessary	0.00 0.00 Prog Rev:	<u>3</u> 2-			4		<u></u>		DD-28-
110 <b>*110*</b> QC Quality Control	QC2- Inspect parts of Memo	f machine FAI/FAIB	0.00				4		೦		<u>Ae</u> 02-28-1
120 <b>*1 9 \*</b> QC Quality Control	QC8- Inspect parts - :  Memo	second check	0.00 P				4				

Quality Control

DQA:			Date:											$rac{1}{2}$
•						<b>WORK ORDER NON-</b>	ORK ORDER NON-CONFORMANCE / UPDATE							AEROSPACE
QA Closed:			Date:			·			<u></u> .	W	ork Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
, work orde	-		· · · · · · · · · · · · · · · · · · ·			Rework	1		Skid-tube	Crosstube	1	Water Jet	$\neg$	Engineering
Part N	lo.					Scrap	1 1		Machining	Small Fab	Pro	d. Eng. Coor.	1	Quality
	-					Use-as-is	1 1		noforming	Finishing	4	e/Packaging	1	Other
NCR N	lo.					Suspected Unapproved	1		Large Fab	Composite	1	Supplier	7	
							•			·	_			
Root					Desci	ription of work order update	ı	Initial	Acti	on	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption	Date	Verification		QC Inspector
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Unapproved			<u> </u>				<u> </u>	III T CAT	TECODY					
Landi		`				General	FA	ULI CA	TEGORY		<del></del>			
Lanui		Bending				Bend	г	Teolio/e	Program	<u> </u>	Outside Dim	onsions [	$\neg$	ressure/Forced
	$\vdash$	Centre No	nt Concer	ntric		BOM/Route	-	Grain	Togram		Over/Under	<u>}-</u>		et-up
	$\vdash$	Cracks	or concer	itiic	-	Broken/Damage/Defect	-	Hardwa	aro		Part Incorred	-	_	enperature/Cure
	-	Crimp/Kir	nk/Rinnle	/Wave	-	Burrs	$\vdash$	4	ion Incomplete/Un	qualified	Part Lost/Mi	<b>-</b>		/eld
	$\overline{}$	Cuffs	ny mppie,	, wave	$\vdash$	Contamination	<b>—</b>	1 '	tions Incomplete/U	· —	Part Moved	231116	—	rong Stock Pulled
	$\overline{}$	Crushing				Countersink	$\vdash$	-1	gned/off center	— <u> </u>	Positioned V	L/rong	'``	Stock i diled
		Heat Trea	ıt			Cut Too Short		Mislabe	•	<b>⊢</b>	Power Loss/		$\neg_{\circ}$	ther
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		Marks/Ch	•			Drill Holes		Off-set						
	П	Turning S				Finish		-	Calibration			<del></del>		
	П	Wave/Tw		e		Fit/Function		-1	Sequence					· · · · · · · · · · · · · · · · · · ·

Work	Order	· ID	113101	
VV UI'K	Oruei	· ID	112101	

\*113101\*

Page 2

February-12-14 8:23:06 AM Item ID: D3535-41 Accept \*N900040100\* Setup Start **Revision ID:** Stainless Steel Wearplate Center Aft Item Name: **Start Date:** 2/10/14 Start Otv: 4.00 **Cust Item ID:** Required Date: 2/10/14 Rea'd Otv: 4.00 **Customer:** Reference: Run Process Plan: Date: Tooling: Approvals: Date: Stop Date: **SPC (Y/N):** Date: Tool # Plan Sequence ID/ Operation Set Up/ Tool ID Accept Reject Reject Insp. **Work Center ID** Description Otv Stamp **Run Hours** Code Oty Number 130 0.00 NC BRAKE \*120\* DAS Brake NC Dag 0.00 Memo 3089 Brake NC Deburr if necessaryForm on Brake as per Dwg D3535 using Jigs DT8261 and 9. DT8326.Identify as D3535-41Form Joggle on brake using Jig DT8158 as per Dwg D3535 140 QC5- Inspect part completeness to step on W/O 0.00 \*140\* OC Memo **Ouality Control** Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 150 0.00 4. 6 143-11 858 M125028 \*150\* Powdercoat 0.00 Memo OVEN TEMPERATURE: Powder Coating

DQA:			Date:											$\mathcal{L}_{\mathcal{A}}$
						<b>WORK ORDER NON-</b>	-CC	ONFO	RMANCE / UPDATE					AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only	ļ	
Work Orde	er:					DISPOSITION			AGAIN	ST DI	EPARTMENT,	/PROCESS		
					_	Rework			Skid-tube Crosstu	be	1	Water Jet		Engineering
Part N	lo.					Scrap			Machining Small F	ab	Pro	d. Eng. Coor.	٦	Quality
						Use-as-is		Therr	noforming Finishi	ng	Rec/Sto	re/Packaging		Other
NCR I	١o.		<del></del>			Suspected Unapproved			Large Fab Compos	te	]	Supplier		
Root				<u> </u>	Descr	iption of work order update		Initial	Action		Sign &	<u> </u>	1	
Cause		Date	Step	Qty	Desci	or non-conformance	1	nief Eng	·		Date	Verification		QC Inspector
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Material						,								
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Landi		1			_	General	_	1 <i>.</i> .		_	٦ .	-		
	_	Bending			$\vdash$	Bend	_	-{	Program	-	Outside Dim	F	-	Pressure/Forced
	_	Centre No	ot Concer	ntric	-	BOM/Route	<u> </u>	Grain		_	Over/Under	<u>-</u>	_	Set-up
	<u> </u>	Cracks		4		Broken/Damage/Defect	L	Hardwa		_	Part Incorre		$\neg$	Temperature/Cure
	H	Crimp/Ki	nk/Ripple	/Wave	-	Burrs	<u> </u>	<b>-</b> 1 '	ion Incomplete/Unqualified	⊢	Part Lost/Mi	-	_	Weld
	—	Cuffs			-	Contamination	$\vdash$	4	tions Incomplete/Unclear	$\vdash$	Part Moved		Ш	Wrong Stock Pulled
	$\vdash$	Crushing			-	Countersink	<u> </u>	-	gned/off center	-	Positioned V		$\neg$	Outle
	<del> </del>	Heat Trea		Tubo		Cut Too Short	$\vdash$	Mislab		L	Power Loss/	Surge [		Other
	H	Inspectio Marks/Ch		rupe	-	Drawing Drill Holes	_	Misrea Off-set					-	
		Turning S			$\vdash$	Finish	-	4	Calibration					
	$\vdash$	Wave/Tw	•			Fit/Function	$\vdash$	-	Sequence					
<u>L</u>		wave/iw	ist in Tub	oe	1	Fit/Function		Out of	Sequence					

W	ork	Order	ID	113101
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\*113101\*

Page 3

February-12-14 8:23:06 AM Item ID: D3535-41 Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Stainless Steel Wearplate Center Aft \*4\* Start Qty: 4.00 **Start Date:** 2/10/14 **Cust Item ID:** Required Date: 2/10/14 Req'd Qty: 4.00 \*4\* **Customer:** Reference: Start Run Process Plan: Date: **Approvals: Tooling:** Date: Stop QC: \_\_\_\_ Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Accept Reject Reject Insp. **Work Center ID Description** Number Stamp Run Hours Code **Qty Qty** 160 QC3- Inspect Part Finish 0.00 \*160\* OC Memo Quality Control Identify as per dwg & Stock Location: [ ] 007 0.00 170 20 & He N/03/4 \*170\* 0.00 Packaging Memo Packaging 180 QC21- Final Inspection - Work Order Release 0.00 MUJ 14-03-12 \*120\* MF 14-3-11 QC 0.00 Memo Quality Control

DQA:			Date:									•	7	
						WORK ORDER NON	-C(	ONFO	RMANCE / UF	PDATE		_		AEROSPACE
QA Closed:			Date:							<u></u>	ork Order up	date only	$\perp$	
Work Orde	er:					DISPOSITION				AGAINST D	EPARTMENT,			
	•				_	Rework	]		Skid-tube	Crosstube	7	Water Jet	7	Engineering
Part N	lo.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is	1	Therr	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR N	No.					Suspected Unapproved	] .		Large Fab	Composite		Supplier		
Root					Desci	ription of work order update		Initial	Acti	ion	Sign &		$\Box$	
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Doc/Data														
Equip/Tooling														
Handling/Pre														
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Operator														
Offset/Setup														
Process											1			
Supplier													-	
Training Transport														
Unapproved													1	
Onapproved			1				EΔ	III T CA	TEGORY				—	
Landi	nø (					General	17	OLI CA	1200111					·
		Bending				Bend		] Folio/F	Program		Outside Dim	ensions [		ressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	<u>}-</u> -		et-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	- t-	_	emperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	T	1	ion Incomplete/Un	ngualified	Part Lost/Mi	ssing	_	/eld
		Cuffs				Contamination		1	tions Incomplete/U	· —	Part Moved			rong Stock Pulled
		Crushing				Countersink		-1	gned/off center		Positioned V			· ·
		Heat Trea	at			Cut Too Short		Mislabe	•		Power Loss/		$\neg$ o	ther
1		Inspectio	n Strip in	Tube		Drawing	Misread							
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence					

February-12-14 8:23:10 AM

Work Order ID: 113101

\*113101\*

Parent Item:

D3535-41

\*D3535-41\*

Parent Item Name:

Stainless Steel Wearplate Center Aft

**Start Date: 2/10/14** 

Required Date: 2/10/14

Start Qty: 4.00

Required Qty: 4.00

**Comments:** 

IPP Rev:A New Issue 07-02-15 JLM

IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

	1			,									
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA		Purchased	No	•		100	sf	134.1019	0.51	<del>- 2.1473</del> 68			
*M304S20 304/316 .040 Sheet	)GA*								**		Ae	2 05	2-28-
				Location	!	Loc (	<u>Otv</u>	Loc Code					
				MAT020		134.1018	3948		_				
					m126852		0.91		_				
					m127454	133.19	1895						

128315 -> 12.15

DQA:			Date:													
						<b>WORK ORDER NON-</b>	-C(	ONFO	RMANCE / UP	PDATE					AEROSPACE	
QA Closed:			Date:								W	ork Order up	date only	_		
Work Orde	er:					DISPOSITION				AGAINST	ST DEPARTMENT/PROCESS					
	•				_	Rework			Skid-tube	Crosstube		1	Water Jet		Engineering	
Part N	lo.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.		Quality	
NCR N	lo.				_	Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	_	Rec/Sto	re/Packaging Supplier		Other	
Root					Doss	rintian of wark and ar undata	<u> </u>	Initial	1 A at:			Cian 0			T	
Cause		Date	Step	Qty	Desci	ription of work order update or non-conformance		ınıtıaı iief Eng	Acti Descri			Sign & Date	Verification	_	OC Inchestor	
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Operator																
Offset/Setup		,														
Process						·		.**	1							
Supplier																
Training																
Transport																
Unapproved																
		· . <del></del> .					FA	ULT CA	TEGORY							
Landi						General						-	,		•	
		Bending			_	Bend	<u></u>	•	Program			Outside Dim		_	Pressure/Forced	
		l	ot Concer	ntric	<u> </u>	BOM/Route	<u>_</u>	Grain			_	Over/Under			Set-up	
		Cracks				Broken/Damage/Defect	<u> </u>	Hardwa			_	Part Incorre			Temperature/Cure	
	_	Crimp/Kir	nk/Ripple	/Wave	$\vdash$	Burrs		1	ion Incomplete/Un	-	L	Part Lost/Mi	~		Weld	
		Cuffs Contamination					<u> </u>	4	tions Incomplete/U	nclear	<u> </u>	Part Moved			Wrong Stock Pulled	
		Crushing			<u> </u>	Countersink	<u> </u>	1 '	gned/off center		<u> </u>	Positioned V		_	1 .	
		Heat Trea		<b>-</b> 1		Cut Too Short		Mislabe			<u></u>	Power Loss/	Surge		Other	
		Inspectio	-	rube	<u> </u>	Drawing	$\vdash$	Misrea								
		Marks/Ch			<u> </u>	Drill Holes	$\vdash$	Off-set								
		1	equence		-	Finish	<u> </u>	-1	Calibration					_		
1	l	Wave/Tw	ist in Tub	e		Fit/Function	1	Out of	Sequence							

DART AEROSPACE LTD	Work Order: 1131	01
Description: Wearshoe	Part Number: D3	535-41
Inspection Dwg: D3535 Rev: B	Pag	e 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.00	+/-0.030	4.00	_		T	JKM-06
Ø0.188	+0.005/-0.001	.188	-		<b>y</b>	JKM-05
5.00	+/-0.030	5.00	_		T	
1.885	+/-0.010	1.890	-		<b>V</b>	
29.079	+/-0.010	29.079	****		T	
25.079	+/-0.010	25.079	-		٢	
18.497	+/-0.010	18.497			7	:
14.997	+/-0.010	14.997	•		٢	
12.472	+/-0.010	12.472	_		7	
8.972	+/-0.010	8.972	_		T	
6.932	+/-0.010	6.932	-		7	
3.432	+/-0.010	3.432	~		7	
2.000	+/-0.010	2.000			7	
0.300	+/-0.010	,300	_		V	
0.300	+/-0.010	.300	_		<b>V</b>	•
0.038	+/-0.010	.035			<b>V</b>	

Measured by: Ae
Date: 02-28-14

Date: 14/3/3

Date: 14/3/3

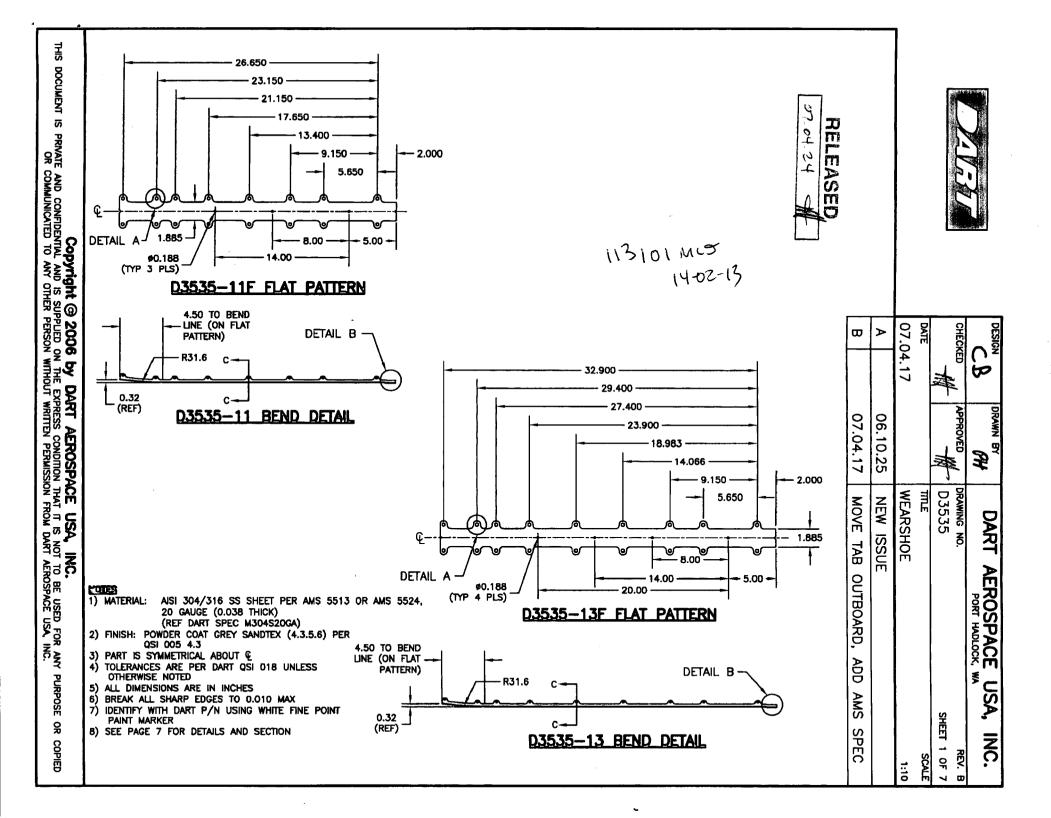
Date: 0AS

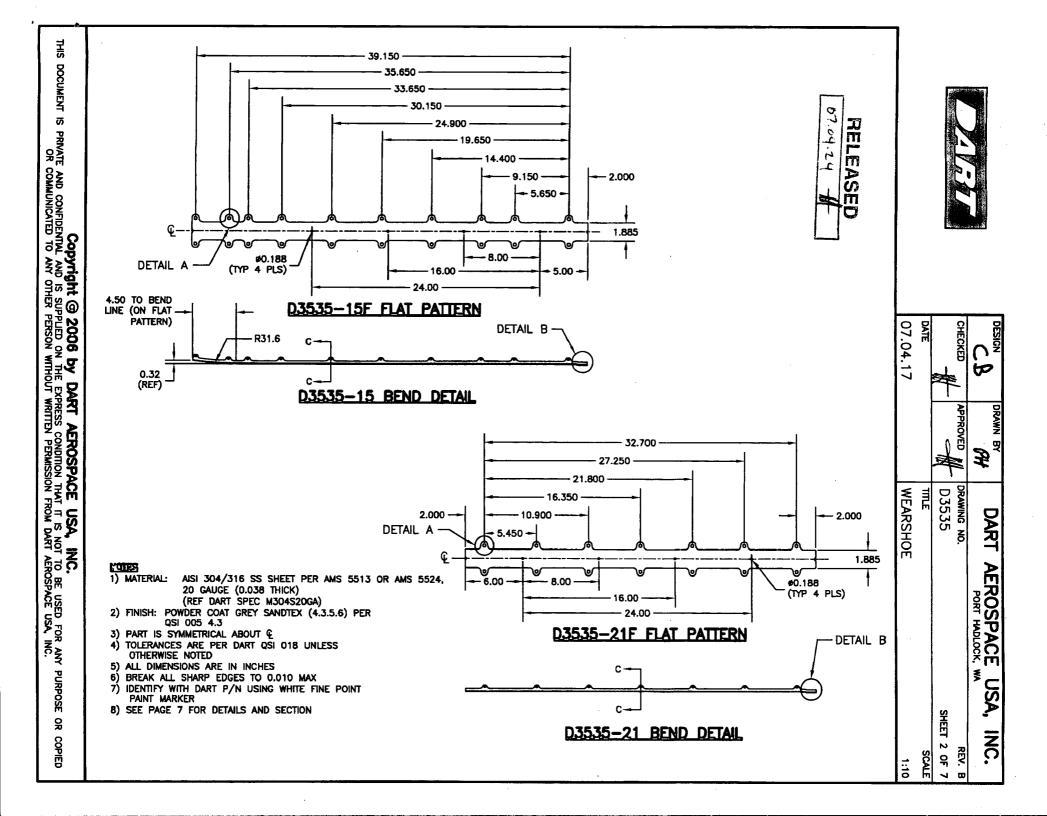
Prototype Approval: N/A

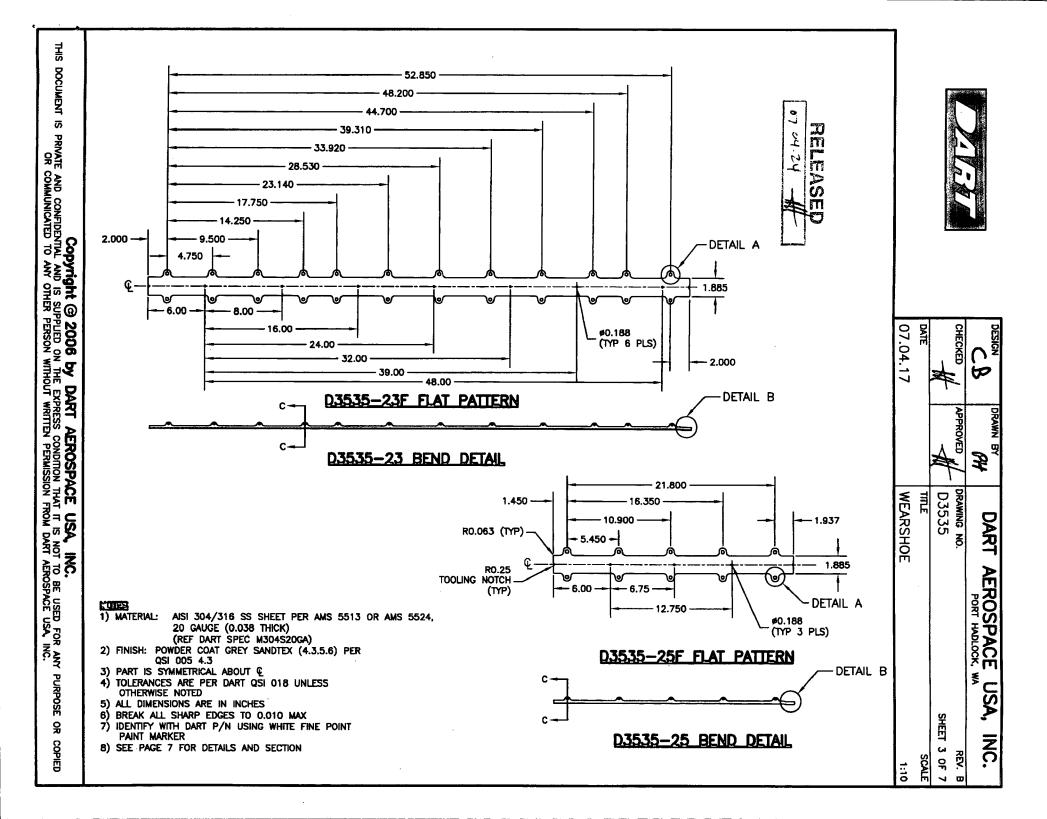
Date: N/A

Rev	Date	Change	Revised by	Approved
Α	07.05.10	New Issue	KJ/JLM 🛠	E

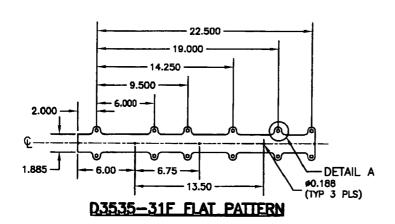
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B

B

DART

AEROSPACE PORT HADLOCK,

ZC.

DRAWING NO.

SHEET

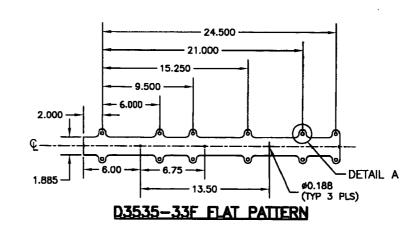
4 OF

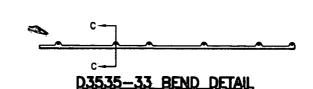
1:10

07.04.17

WEARSHOE

		c —	
		c	
D3535-31	BEND	DETAIL	





1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524,

20 GAUGE (0.038 THICK)
(REF DART SPEC M304S20GA)
2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER
QSI 005 4.3

3) PART IS SYMMETRICAL ABOUT &

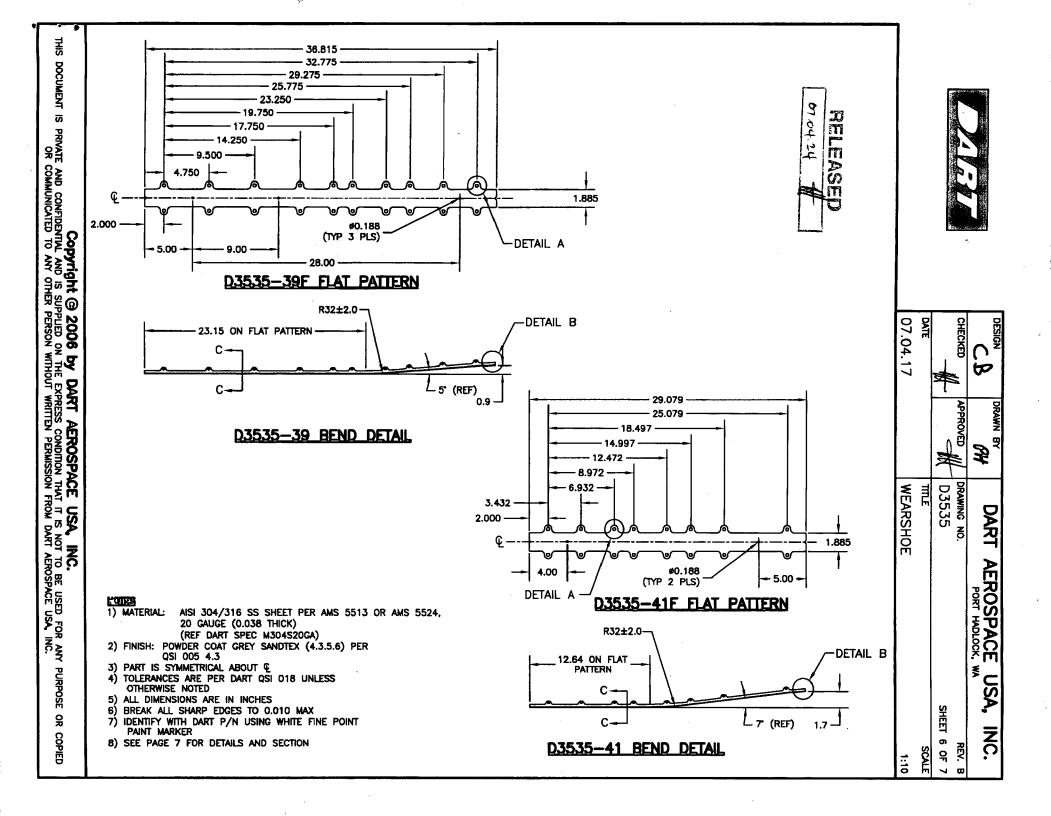
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

BREAK ALL SHARP EDGES TO 0.010 MAX

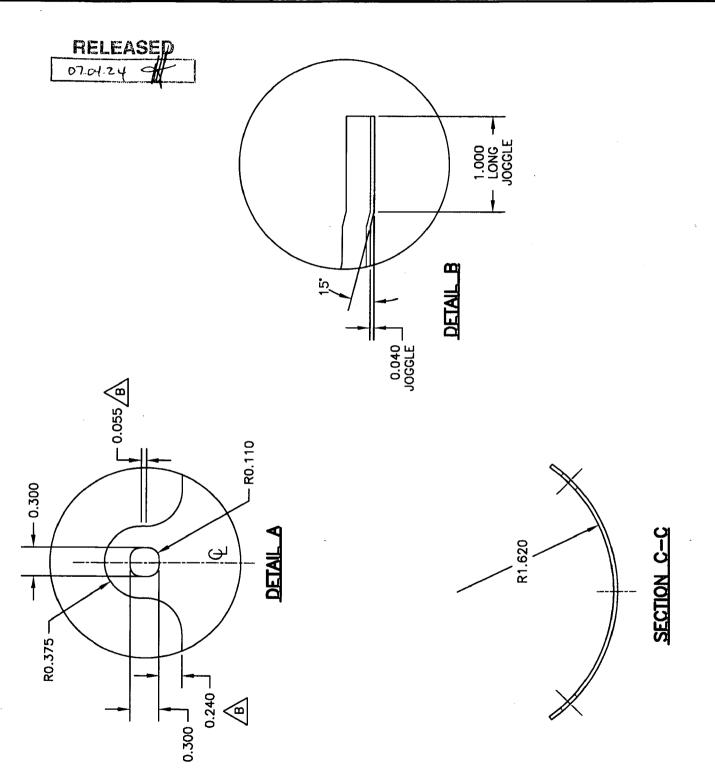
IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER

8) SEE PAGE 7 FOR DETAILS AND SECTION





CB CB	DRAWN BY	DART	AEROSPACE USA, INC.
CHECKED	APPROVED/	DRAWING NO.	REV. B
		D3535	SHEET 7 OF 7
DATE		TITLE	SCALE
07.04.17		WEARSHOE	



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